Youngsoon Um

List of Publications by Year
in descending order

78 papers	3,275 citations	117453 34 h-index	155451 55 g-index
79 all docs	79 docs citations	79 times ranked	3740 citing authors

#	Article	IF	Citations
1	Electricity-driven metabolic shift through direct electron uptake by electroactive heterotroph Clostridiumpasteurianum. Scientific Reports, 2014, 4, 6961.	1.6	165
2	Continuous Butanol Production Using Suspended and Immobilized Clostridium beijerinckii NCIMB 8052 with Supplementary Butyrate. Energy & Fuels, 2008, 22, 3459-3464.	2.5	135
3	Butyrate production enhancement by Clostridium tyrobutyricum using electron mediators and a cathodic electron donor. Biotechnology and Bioengineering, 2012, 109, 2494-2502.	1.7	130
4	Detoxification of model phenolic compounds in lignocellulosic hydrolysates with peroxidase for butanol production from Clostridium beijerinckii. Applied Microbiology and Biotechnology, 2009, 83, 1035-1043.	1.7	123
5	Microbial Fed-batch Production of 1,3-Propanediol Using Raw Glycerol with Suspended and Immobilized Klebsiella pneumoniae. Applied Biochemistry and Biotechnology, 2010, 161, 491-501.	1.4	107
6	Pretreatment of rice straw with combined process using dilute sulfuric acid and aqueous ammonia. Biotechnology for Biofuels, 2013, 6, 109.	6.2	101
7	Butanol production from thin stillage using Clostridium pasteurianum. Bioresource Technology, 2011, 102, 4934-4937.	4.8	91
8	Ethanol production from lignocellulosic hydrolysates using engineered Saccharomyces cerevisiae harboring xylose isomerase-based pathway. Bioresource Technology, 2016, 209, 290-296.	4.8	91
9	A dye-decolorizing peroxidase from Bacillus subtilis exhibiting substrate-dependent optimum temperature for dyes and Î²-ether lignin dimer. Scientific Reports, 2015, 5, 8245.	1.6	90
10	In Situ Biphasic Extractive Fermentation for Hexanoic Acid Production from Sucrose by Megasphaera elsdenii NCIMB 702410. Applied Biochemistry and Biotechnology, 2013, 171, 1094-1107.	1.4	85
11	Production of hexanoic acid from d-galactitol by a newly isolated Clostridium sp. BS-1. Applied Microbiology and Biotechnology, 2010, 88, 1161-1167.	1.7	82
12	Effect of Biodiesel-derived Raw Glycerol on 1,3-Propanediol Production by Different Microorganisms. Applied Biochemistry and Biotechnology, 2010, 161, 502-510.	1.4	81
13	Optimization of medium compositions favoring butanol and 1,3-propanediol production from glycerol by Clostridium pasteurianum. Bioresource Technology, 2011, 102, 10561-10568.	4.8	81
14	High production of 2,3-butanediol from biodiesel-derived crude glycerol by metabolically engineered Klebsiella oxytoca M1. Biotechnology for Biofuels, 2015, 8, 146.	6.2	81
15	Photosynthetic conversion of CO2 to farnesyl diphosphate-derived phytochemicals (amorpha-4,11-diene and squalene) by engineered cyanobacteria. Biotechnology for Biofuels, 2016, 9, 202.	6.2	75
16	Polycyclic Aromatic Hydrocarbon (PAH) Degradation Coupled to Methanogenesis. Biotechnology Letters, 2006, 28, 425-430.	1.1	74
17	Microbial Synthesis of Myrcene by Metabolically Engineered Escherichia coli. Journal of Agricultural and Food Chemistry, 2015, 63, 4606-4612.	2.4	67
18	Electrochemical detoxification of phenolic compounds in lignocellulosic hydrolysate for Clostridium fermentation. Bioresource Technology, 2015, 187, 228-234.	4.8	62

#	Article	IF	Citations
19	Engineering of a modular and synthetic phosphoketolase pathway for photosynthetic production of acetone from <scp>CO</scp>₂ in <scp>S</scp>ynechococcus elongatus <scp>PCC</scp> 7942 under light and aerobic condition. Plant Biotechnology Journal, 2016, 14, 1768-1776.	4.1	62
20	Production of medium-chain carboxylic acids by Megasphaera sp. MH with supplemental electron acceptors. Biotechnology for Biofuels, 2016, 9, 129.	6.2	60
21	Improved simultaneous co-fermentation of glucose and xylose by Saccharomyces cerevisiae for efficient lignocellulosic biorefinery. Biotechnology for Biofuels, 2020, 13, 12.	6.2	60
22	Synthetic biology platform of CoryneBrick vectors for gene expression in Corynebacterium glutamicum and its application to xylose utilization. Applied Microbiology and Biotechnology, 2014, 98, 5991-6002.	1.7	58
23	Enhanced 2,3-Butanediol Production by Optimizing Fermentation Conditions and Engineering Klebsiella oxytoca M1 through Overexpression of Acetoin Reductase. PLoS ONE, 2015, 10, e0138109.	1.1	56
24	Improvement of Squalene Production from CO₂ in Synechococcus elongatus PCC 7942 by Metabolic Engineering and Scalable Production in a Photobioreactor. ACS Synthetic Biology, 2017, 6, 1289-1295.	1.9	53
25	Development of SyneBrick Vectors As a Synthetic Biology Platform for Gene Expression in Synechococcus elongatus PCC 7942. Frontiers in Plant Science, 2017, 8, 293.	1.7	53
26	RNA-guided single/double gene repressions in Corynebacterium glutamicum using an efficient CRISPR interference and its application to industrial strain. Microbial Cell Factories, 2018, 17, 4.	1.9	52
27	Improved bioconversion of lignocellulosic biomass by Saccharomyces cerevisiae engineered for tolerance to acetic acid. GCB Bioenergy, 2020, 12, 90-100.	2.5	52
28	Modular pathway engineering of Corynebacterium glutamicum to improve xylose utilization and succinate production. Journal of Biotechnology, 2017, 258, 69-78.	1.9	50
29	Direct Conversion of CO₂ to Î±-Farnesene Using Metabolically Engineered Synechococcus elongatus PCC 7942. Journal of Agricultural and Food Chemistry, 2017, 65, 10424-10428.	2.4	49
30	Highâ€yield lipid production from lignocellulosic biomass using engineered xyloseâ€utilizing Yarrowia lipolytica. GCB Bioenergy, 2020, 12, 670-679.	2.5	46
31	Biomass, strain engineering, and fermentation processes for butanol production by solventogenic clostridia. Applied Microbiology and Biotechnology, 2016, 100, 8255-8271.	1.7	44
32	Succinate production from CO2-grown microalgal biomass as carbon source using engineered Corynebacterium glutamicum through consolidated bioprocessing. Scientific Reports, 2014, 4, 5819.	1.6	40
33	Molecular Characterization of Polycyclic Aromatic Hydrocarbon (PAH)-Degrading Methanogenic Communities. Biotechnology Progress, 2008, 21, 682-688.	1.3	39
34	Genomic and phenotypic characterization of a refactored xylose-utilizing Saccharomyces cerevisiae strain for lignocellulosic biofuel production. Biotechnology for Biofuels, 2018, 11, 268.	6.2	37
35	Photosynthetic CO₂ Conversion to Fatty Acid Ethyl Esters (FAEEs) Using Engineered Cyanobacteria. Journal of Agricultural and Food Chemistry, 2017, 65, 1087-1092.	2.4	36
36	Largely enhanced bioethanol production through the combined use of lignin-modified sugarcane and xylose fermenting yeast strain. Bioresource Technology, 2018, 256, 312-320.	4.8	35

#	Article	IF	Citations
37	Adaptive evolution and metabolic engineering of a cellobiose- and xylose- negative Corynebacterium glutamicum that co-utilizes cellobiose and xylose. Microbial Cell Factories, 2016, 15, 20.	1.9	34
38	Conversion of levulinic acid to 2-butanone by acetoacetate decarboxylase from Clostridium acetobutylicum. Applied Microbiology and Biotechnology, 2013, 97, 5627-5634.	1.7	28
39	Pretreatment of macroalgae for volatile fatty acid production. Bioresource Technology, 2013, 146, 754-757.	4.8	28
40	Transcriptome landscape of Synechococcus elongatus PCC 7942 for nitrogen starvation responses using RNA-seq. Scientific Reports, 2016, 6, 30584.	1.6	28
41	Complete Genome Sequence of Klebsiella oxytoca KCTC 1686, Used in Production of 2,3-Butanediol. Journal of Bacteriology, 2012, 194, 2371-2372.	1.0	27
42	Selective Production of 2,3-Butanediol and Acetoin by a Newly Isolated Bacterium Klebsiella oxytoca M1. Applied Biochemistry and Biotechnology, 2013, 170, 1922-1933.	1.4	27
43	Engineering ofCorynebacterium glutamicumfor growth and succinate production from levoglucosan, a pyrolytic sugar substrate. FEMS Microbiology Letters, 2015, 362, fnv161.	0.7	27
44	Enhanced butyric acid production using mixed biomass of brown algae and rice straw by Clostridium tyrobutyricum ATCC25755. Bioresource Technology, 2019, 273, 446-453.	4.8	27
45	Effect of manganese ions on ethanol fermentation by xylose isomerase expressing Saccharomyces cerevisiae under acetic acid stress. Bioresource Technology, 2016, 222, 422-430.	4.8	26
46	Butyric acid production from softwood hydrolysate by acetate-consuming Clostridium sp. S1 with high butyric acid yield and selectivity. Bioresource Technology, 2016, 218, 1208-1214.	4.8	26
47	High production of 2,3-butanediol from glycerol without 1,3-propanediol formation by Raoultella ornithinolytica B6. Applied Microbiology and Biotechnology, 2017, 101, 2821-2830.	1.7	26
48	Effective isopropanolâ€“butanol (IB) fermentation with high butanol content using a newly isolated Clostridium sp. A1424. Biotechnology for Biofuels, 2016, 9, 230.	6.2	24
49	Complete genome sequence of Bacillus sp. 275, producing extracellular cellulolytic, xylanolytic and ligninolytic enzymes. Journal of Biotechnology, 2017, 254, 59-62.	1.9	24
50	Complete Genome Sequence of Raoultella ornithinolytica Strain B6, a 2,3-Butanediol-Producing Bacterium Isolated from Oil-Contaminated Soil. Genome Announcements, 2013, 1, .	0.8	22
51	In situ detoxification of lignocellulosic hydrolysate using a surfactant for butyric acid production by Clostridium tyrobutyricum ATCC 25755. Process Biochemistry, 2015, 50, 630-635.	1.8	21
52	Rapid identification of unknown carboxyl esterase activity in Corynebacterium glutamicum using RNA-guided CRISPR interference. Enzyme and Microbial Technology, 2018, 114, 63-68.	1.6	19
53	Improved 2,3-butanediol yield and productivity from lignocellulose biomass hydrolysate in metabolically engineered Enterobacter aerogenes. Bioresource Technology, 2020, 309, 123386.	4.8	18
54	Effect of manganese peroxidase on the decomposition of cellulosic components: Direct cellulolytic activity and synergistic effect with cellulase. Bioresource Technology, 2022, 343, 126138.	4.8	18

#	Article	IF	Citations
55	Asticcacaulis solisilvae sp. nov., isolated from forest soil. International Journal of Systematic and Evolutionary Microbiology, 2013, 63, 3829-3834.	0.8	17
56	Process design and evaluation of value-added chemicals production from biomass. Biotechnology and Bioprocess Engineering, 2012, 17, 1055-1061.	1.4	16
57	Aerobic and anaerobic cellulose utilization by Paenibacillus sp. CAA11 and enhancement of its cellulolytic ability by expressing a heterologous endoglucanase. Journal of Biotechnology, 2018, 268, 21-27.	1.9	16
58	Butyric acid production with high selectivity coupled with acetic acid consumption in sugar-glycerol mixture fermentation by Clostridium tyrobutyricum ATCC25755. Journal of Industrial and Engineering Chemistry, 2019, 75, 44-51.	2.9	16
59	Transcriptomic analysis of Corynebacterium glutamicum in the response to the toxicity of furfural present in lignocellulosic hydrolysates. Process Biochemistry, 2015, 50, 347-356.	1.8	13
60	Intracellular metabolite profiling and the evaluation of metabolite extraction solvents for Clostridium carboxidivorans fermenting carbon monoxide. Process Biochemistry, 2020, 89, 20-28.	1.8	13
61	Extreme furfural tolerance of a soil bacterium Enterobacter cloacae GGT036. Journal of Biotechnology, 2015, 193, 11-13.	1.9	12
62	Analysis of the Microbial Community in an Acidic Hollow-Fiber Membrane Biofilm Reactor (Hf-MBfR) Used for the Biological Conversion of Carbon Dioxide to Methane. PLoS ONE, 2015, 10, e0144999.	1.1	12
63	Perspectives for biocatalytic lignin utilization: cleaving 4-O-5 and CÎ±â€“CÎ² bonds in dimeric lignin model compounds catalyzed by a promiscuous activity of tyrosinase. Biotechnology for Biofuels, 2017, 10, 212.	6.2	11
64	Butyric acid production from red algae by a newly isolated Clostridium sp. S1. Biotechnology Letters, 2015, 37, 1837-1844.	1.1	10
65	Influences of Media Compositions on Characteristics of Isolated Bacteria Exhibiting Lignocellulolytic Activities from Various Environmental Sites. Applied Biochemistry and Biotechnology, 2017, 183, 931-942.	1.4	10
66	Burkholderia jirisanensis sp. nov., isolated from forest soil. International Journal of Systematic and Evolutionary Microbiology, 2016, 66, 1260-1267.	0.8	10
67	Enhancing Fatty Acid Production of Saccharomyces cerevisiae as an Animal Feed Supplement. Journal of Agricultural and Food Chemistry, 2017, 65, 11029-11035.	2.4	9
68	High Production of 2,3-Butanediol (2,3-BD) by Raoultella ornithinolytica B6 via Optimizing Fermentation Conditions and Overexpressing 2,3-BD Synthesis Genes. PLoS ONE, 2016, 11, e0165076.	1.1	9
69	Production of Hexanol as the Main Product Through Syngas Fermentation by Clostridium carboxidivorans P7. Frontiers in Bioengineering and Biotechnology, 2022, 10, 850370.	2.0	8
70	Complete genome sequence of Enterobacter cloacae GGT036: A furfural tolerant soil bacterium. Journal of Biotechnology, 2015, 193, 43-44.	1.9	7
71	Engineering of Corynebacterium glutamicum to utilize methyl acetate, a potential feedstock derived by carbonylation of methanol with CO. Journal of Biotechnology, 2016, 224, 47-50.	1.9	7
72	Characterization of a Novel Acetogen Clostridium sp. JS66 for Production of Acids and Alcohols: Focusing on Hexanoic Acid Production from Syngas. Biotechnology and Bioprocess Engineering, 2022, 27, 89-98.	1.4	7

#	Article	IF	Citations
73	Improving Lipid Production of Yarrowia lipolytica by the Aldehyde Dehydrogenase-Mediated Furfural Detoxification. International Journal of Molecular Sciences, 2022, 23, 4761.	1.8	6
74	A simple and effective plating method to screen polycyclic aromatic hydrocarbon-degrading bacteria under various redox conditions. Applied Microbiology and Biotechnology, 2010, 88, 291-297.	1.7	4
75	Deletion of the budBAC operon in Klebsiella pneumoniae to understand the physiological role of 2,3-butanediol biosynthesis. Preparative Biochemistry and Biotechnology, 2016, 46, 410-419.	1.0	4
76	Complete genome sequence of Klebsiella oxytoca M1, isolated from Manripo area of South Korea. Journal of Biotechnology, 2015, 198, 1-2.	1.9	2
77	Complete Genome Sequence of Paenibacillus sp. CAA11: A Promising Microbial Host for Lignocellulosic Biorefinery with Consolidated Processing. Current Microbiology, 2019, 76, 732-737.	1.0	1
78	Glucose/Xylose Co-Fermenting Saccharomyces cerevisiae Increases the Production of Acetyl-CoA Derived n-Butanol From Lignocellulosic Biomass. Frontiers in Bioengineering and Biotechnology, 2022, 10, 826787.	2.0	1